



STIC Search Report

EIC 3700

STIC Database Tracking Number: 160334

TO: Patricia Martin
Location: RND 8a40
Art Unit: 3700
Monday, July 25, 2005

Case Serial Number: 10/800651

From: Terry Solomon
Location: EIC 3700
RND 8b31
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Search Notes

No current or past litigation found involving US pat. 5946906.

Sources:

Lexis/Nexis
Questel-Orbit
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975101 (08) 5946906 September 7, 1999

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5946906

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September 7, 1999

Exhaust gas purification system of internal combustion engine

REISSUE: September 5, 2001 - Reissue Application filed Ex. Gp.: 3745; Re. S.N. 09/945,835 (O.G. June 18, 2002)

March 16, 2004 - Reissue Application filed Ex. Gp.: 3745; Re. S.N. 10/800,651 (O.G. June 29, 2004)

APPL-NO: 975101 (08)

FILED-DATE: November 20, 1997

GRANTED-DATE: September 7, 1999

ASSIGNEE-AT-ISSUE: Honda Giken Kogyo Kabushiki Kaisha, Tokyo, Japan (JP), 03

ASSIGNEE-AFTER-ISSUE: November 20, 1997 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., HONDA GIKEN KOGYO KABUSHIKI KAISHA 1- 1, MINAMI-AOYAMA 2-CHOME MINATO-KU, TOKYO JAPAN, Reel and Frame Number: 08826/0487

LEGAL-REP: Nikaido, Marmelstein, Murray & Oram, LLP

[Search](#) > [Patent Search](#) > Searching

Patent Search - Number: 5,946,906

No cases containing this patent number were found.

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** SS 1: Results 1
PRT SS 1 MAX 1 LEGALALL

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Patent Number :

US5946906 A 19990907 [US5946906]

Title :

(A) Exhaust gas purification system of internal combustion engine

Patent Assignee :

(A) HONDA MOTOR CO LTD (JP)

Patent Assignee :

Honda Giken Kogyo Kabushiki Kaisha, Tokyo [JP]

Inventor(s) :

(A) SATOH TADASHI (JP); AKAZAKI SHUSUKE (JP); HAGA TAKASHI (JP);

HANADA KOHEI (JP); YASUI YUJI (JP)

Application Nbr :

US97510197 19971120 [1997US-0975101]

Priority Details :

JP32480996 19961120 [1996JP-0324809]

Intl Patent Class :

(A) F01N-003/00

EPO ECLA Class :

B01D-053/94Y

F01N-003/08B10

F01N-003/08B10A

F01N-009/00

F02D-021/08

EPO ICO Class :

R01N-003/08B21

R01N-007/02

R01N-007/02S

R01N-250/12

R01N-370/40

R01N-410/00

R02M-025/07T

US Patent Class :

ORIGINAL (O) : 060278000; CROSS-REFERENCE (X) : 060284000 060288000
060297000

Document Type :

Corresponding document

Citations :

US5125231; US5207734; US5315824; US5388405; US5544482; US5657736;
EP0616115; EP0719926; DE4328125; JP4-17710; JP5-171929; JP6-101461;
JP8-71427

Patent Abstracts of Japan, vol. 018, No. 607 (M-1707), Nov. 18, 1994 &
JP 06-229324 (Nissan Motor Co. Ltd.), Aug. 16, 1994.

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JP 04-017710 (Mazda Motor Corp.), Jan. 22, 1992.

Publication Stage :

(A) United States patent

Abstract :

A system for purifying exhaust gas generated by an internal combustion engine including a bypass branching out from the exhaust pipe downstream of a catalyst and merging to the exhaust pipe, an adsorber installed in the bypass, a bypass valve member which closes the bypass, and an EGR

conduit connected to the bypass at one end and connected to the air intake system for recirculating the exhaust gas to the air intake system. The bypass valve member is opened for a period after engine startup to introduce the exhaust gas such that the adsorber installed in the bypass adsorbs the unburnt HC component in the exhaust gas. The adsorber adsorbs the HC component when the exhaust temperature rises and the adsorbed component is recirculated to the air intake system through the EGR conduit. In the system, the bypass valve is provided at or close to the branching point in the exhaust pipe and a chamber is provided close to the branching point such that the conduit is connected to the bypass at the one end in the chamber. The bypass valve member is combined with an exhaust pipe valve member as a combination valve such that when the bypass valve member closes the bypass, the exhaust pipe valve member opens the exhaust pipe. With the arrangement, the system can effectively prevent the exhaust pipe from being clogged even when a valve for closing a bypass is stuck in the closed position. At the same time, the system can provide a relatively short EGR conduit for recirculating unburnt HC component adsorbed from the adsorber and the adsorption and desorption are conducted optimally.

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Application Number :

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Action Taken :

19971120 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: HONDA GIKEN KOGYO KABUSHIKI KAISHA 1-1, MINAMI-AOY; EFFECTIVE

DATE: 19971114

19971120 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: AKAZAKI, SHUSUKE; EFFECTIVE DATE: 19971114

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ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: HANADA, KOHEI; EFFECTIVE DATE: 19971114

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ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: YASUI, YUJI; EFFECTIVE DATE: 19971114

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ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: SATOH, TADASHI; EFFECTIVE DATE: 19971114

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OWNER: HAGA, TAKASHI; EFFECTIVE DATE: 19971114

20020618 US/RF-A

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EFFECTIVE DATE: 20010905

20040629 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20040316

Update Code :

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Patent Number :

5,946,906 A 19990907 [US5946906]

Patent Assignee :

Honda Motor Co Ltd JP

Actions :

20010905 REISSUE REQUESTED

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REISSUE REQUEST NUMBER: 09/945835

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3745

Reissue Patent Number:

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